BEXIS 2.2.0
Installation Manual

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Content

1. BExIS Package 3
2. Additional Software / Prerequisites 3
   2.1. .NET Framework 4.0 3
   2.2. ASP.NET MVC 3 3
   2.3. DB2 Express 10.1 4
      2.3.1. Download Db2 Express C 10 4
      2.3.2. Installation of Db2 Express C 10 4
      2.3.3. Install IBM Data Studio 7
3. Setup Internet Information Service (IIS) 10
   3.1. Active IIS7 10
   3.2. Register .Net Framework 4.0 in IIS 10
4. Deploy BExIS web application 11
   4.1. Configure server components 11
      4.1.1. Create application user 11
      4.1.2. Configure IIS 11
      4.1.3. Create Website 12
      4.1.4. Create empty database 12
   4.2. Install BEXIS package 14
      4.2.1. Create database from backup 14
      4.2.2. Deploy Website 16
      4.2.3. Start Website 16
5. Hints 17
6. Errors 17

   ERROR [08004][IBM] SQL30061 17

   ERROR [08001][IBM] SQL30081n 17

   ERROR HTTP-ERROR 403.14 17

   ERROR HTTP- ERROR 404.2 17

   ERROR SQL1159 17

1. BExIS Package

- First download the BEXIS 2.2.0 package from http://fusion.cs.uni-jena.de/bexis/download/current-release
- Unzip BEXIS 2.2.0
- Usage of contained files and folders is described in section 4.

2. Additional Software / Prerequisites

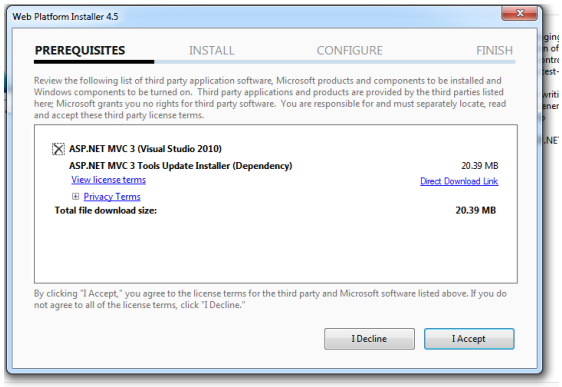
The following software is needed to run the BEXIS web application. If they are installed on your computer already please jump to section 3. If not, please download Prerequisites.zip from: http://fusion.cs.uni-jena.de/bexis/download/current-release and unzip the file.

2.1. .NET Framework 4.0

- Open folder Prerequisites\.NET 4 and start "**dotNetFx40_Full_x86_x64.exe"** as admin
- Or download it here: Download .net Framework 4.0
- follow the steps in the installation window

2.2. ASP.NET MVC 3

- Open folder Prerequisites\ASP.NetMVC3 and start "**MVC3.exe**" as admin
- Or download it here: Download ASP.NET MVC 3
- follow the steps in the installation window


Web Platform Installer 4.5
PREREQUISITES
INSTALL
CONFIGURE
FINISH
Review the following list of third party application software, Microsoft products and components to be installed and Windows components to be turned on. Third party applications and products are provided by the third parties listed here; Microsoft grants you no rights for third party software. You are responsible for and must separately locate, read and accept these third party license terms.
ASP.NET MVC 3 (Visual Studio 2010)
ASP.NET MVC 3 Tools Update Installer (Dependency)
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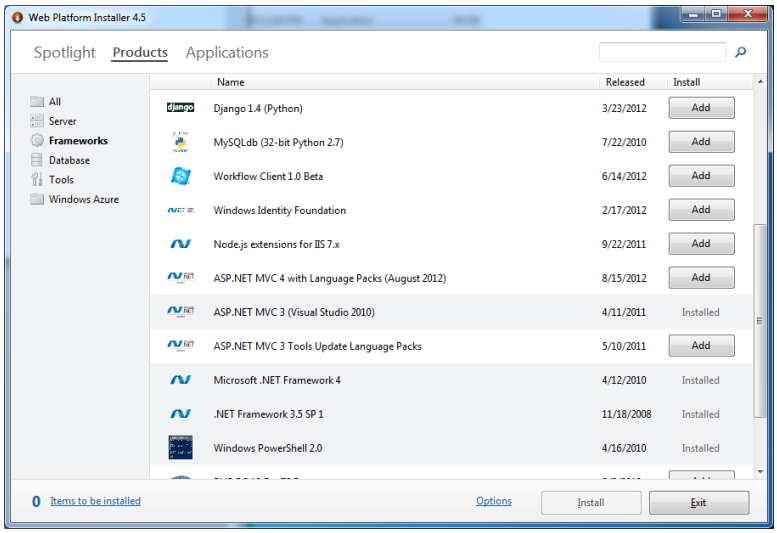
Total file download size:
20.39 MB
By clicking "I Accept," you agree to the license terms for the third party and Microsoft software listed above. If you do not agree to all of the license terms, click "I Decline."
I Decline
I Accept

1 First step shows the prerequisites of mvc3

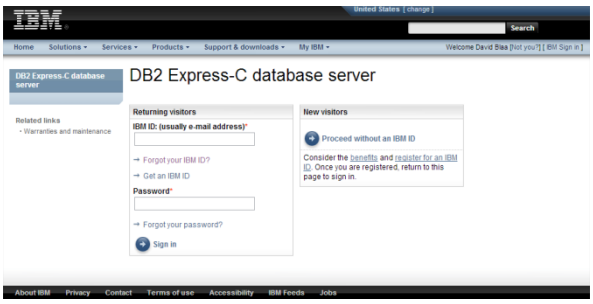
- After the Prerequisites window another window with some installation options will appear
- Go to **Products**
- Select **Frameworks**
- Here you need to find **MVC3** and .**NET 4**
- If this not installed click on the add button and start the installation



2.3. DB2 Express-C

2.3.1. Download DB2 Express-C

Depending on your hardware and your installed OS select either the 32bit or 64bit version from the following link: Download DB2 Express-C

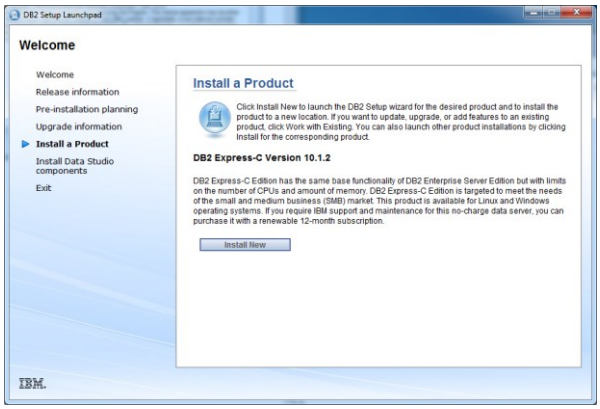


2Download DB2 Express-C

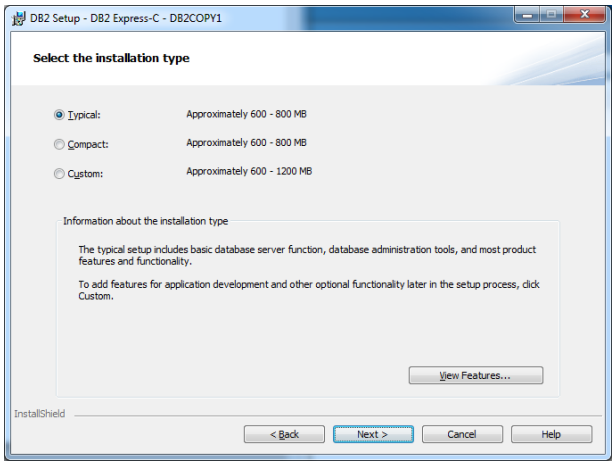
Log in with the IBM user account.
If you have no IBM user account, you need to create one.

2.3.2. Installation of DB2 Express-C

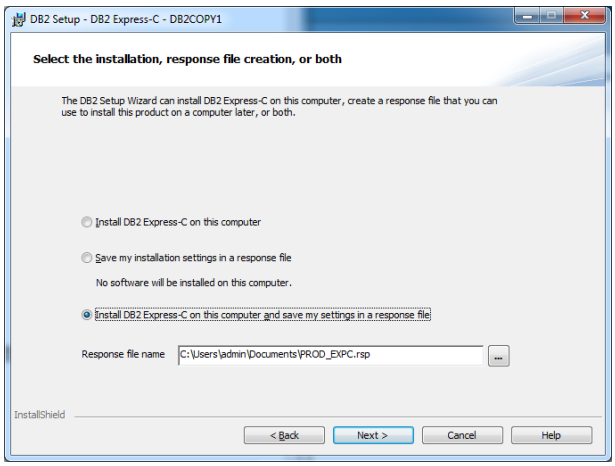
- Execute the downloaded installer file (*.exe).



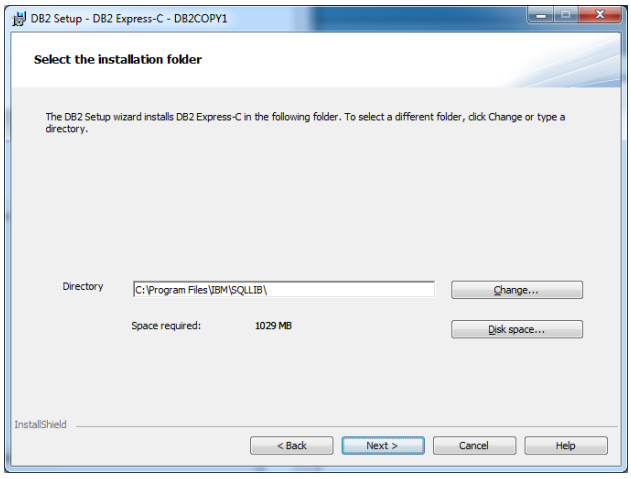
- Choose the installation type – “typical” is appropriate in most cases


DB2 Setup - DB2 Express-C - DB2COPY1
Select the installation type
Typical:
Approximately 600 - 800 MB
Compact:
Approximately 600 - 800 MB
Custom:
Approximately 600 - 1200 MB
Information about the installation type
The typical setup includes basic database server function, database administration tools, and most product features and functionality.
To add features for application development and other optional functionality later in the setup process, click Custom.
View Features...
InstallShield
< Back
Next >
Cancel
Help

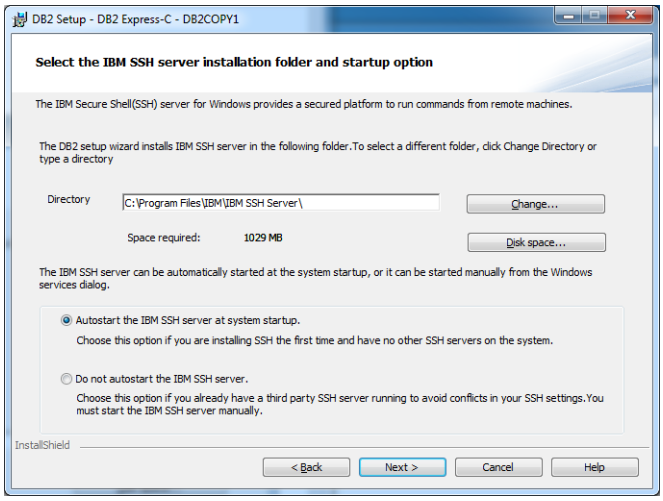
- Select Installation or response file or both


DB2 Setup - DB2 Express-C - DB2COPY1
Select the installation, response file creation, or both
The DB2 Setup Wizard can install DB2 Express-C on this computer, create a response file that you can use to install this product on a computer later, or both.
Install DB2 Express-C on this computer
Save my installation settings in a response file
No software will be installed on this computer.
Install DB2 Express-C on this computer and save my settings in a response file
Response file name
C:\Users\admin\Documents\PROD_EXPC.rsp
InstallShield
< Back
Next >
Cancel
Help

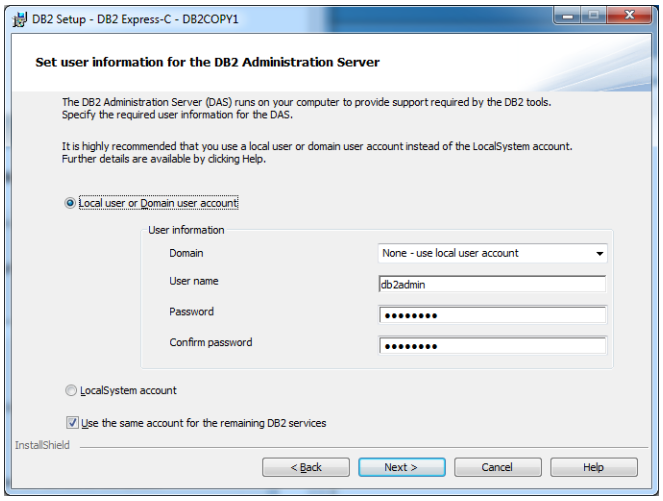
- Select the installation folder (use the default path)



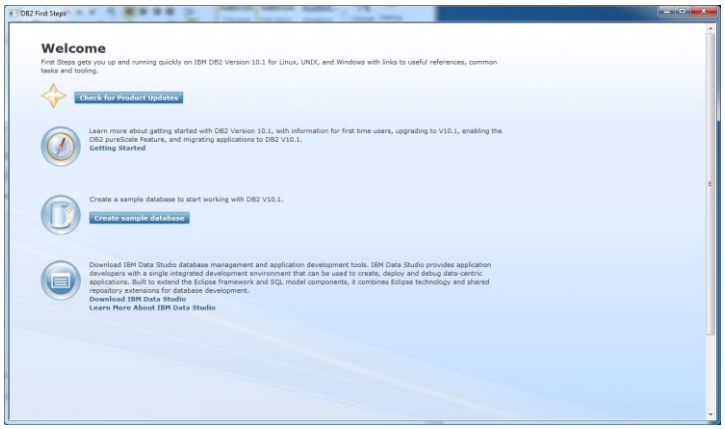
- Use default


DB2 Setup - DB2 Express-C - DB2COPY1
Select the IBM SSH server installation folder and startup option
The IBM Secure Shell(SSH) server for Windows provides a secured platform to run commands from remote machines.
The DB2 setup wizard installs IBM SSH server in the following folder.To select a different folder, click Change Directory or type a directory
Directory
C:\Program Files\IBM\IBM SSH Server\
Change...
Space required:
1029 MB
Disk space...
The IBM SSH server can be automatically started at the system startup, or it can be started manually from the Windows services dialog.
Autostart the IBM SSH server at system startup.
Choose this option if you are installing SSH the first time and have no other SSH servers on the system.
Do not autostart the IBM SSH server.
Choose this option if you already have a third party SSH server running to avoid conflicts in your SSH settings.You must start the IBM SSH server manually.
InstallShield
< Back
Next >
Cancel
Help

- Define the db2admin password
  Please make sure you recall the password later on!

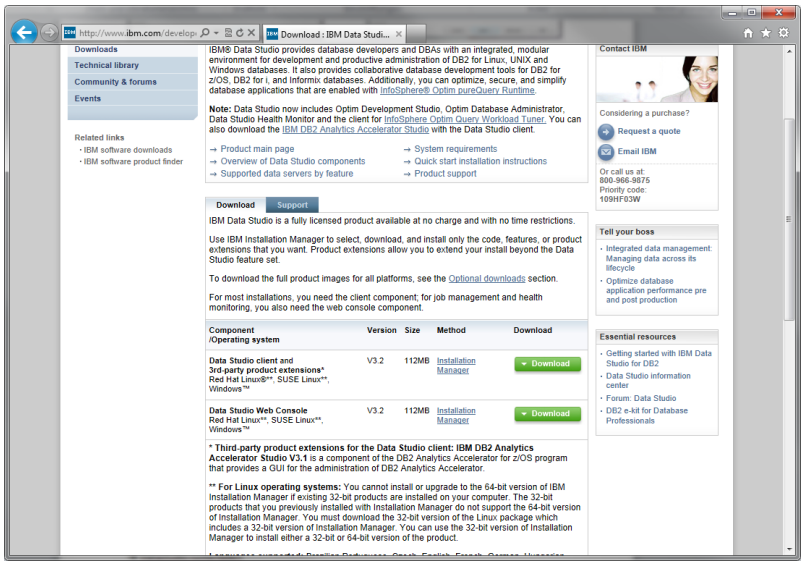

DB2 Setup - DB2 Express-C - DB2COPY1
Set user information for the DB2 Administration Server
The DB2 Administration Server (DAS) runs on your computer to provide support required by the DB2 tools.
Specify the required user information for the DAS.
It is highly recommended that you use a local user or domain user account instead of the LocalSystem account.
Further details are available by clicking Help.
Local user or Domain user account
User information
Domain
None - use local user account
User name
db2admin
Password
Confirm password
LocalSystem account
Use the same account for the remaining DB2 services
InstallShield
< Back
Next >
Cancel
Help

- After the installation you should see the this screen



2.3.3. Install IBM Data Studio

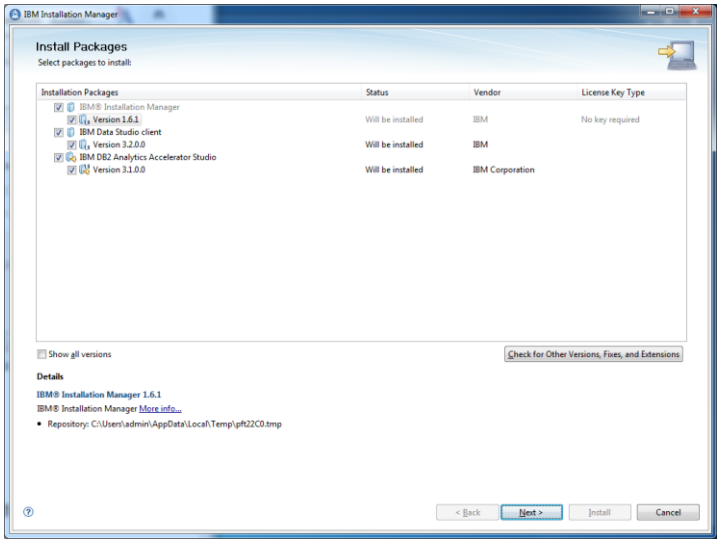
- Select "**Download IBM Data Studio**"


Downloads
Technical library
Community & forums
Events
Related links
IBM software downloads
IBM software product finder
IBM® Data Studio provides database developers and DBAs with an integrated, modular environment for development and productive administration of DB2 for Linux, UNIX and Windows databases. It also provides collaborative database development tools for DB2 for z/OS, DB2 for i, and Informix databases. Additionally, you can optimize, secure, and simplify database applications that are enabled with InfoSphere® Optim pureQuery Runtime.
Note: Data Studio now includes Optim Development Studio, Optim Database Administrator, Data Studio Health Monitor and the client for InfoSphere Optim Query Workload Tuner. You can also download the IBM DB2 Analytics Accelerator Studio with the Data Studio client.
Product main page
Overview of Data Studio components
Supported data servers by feature
System requirements
Quick start installation instructions
Product support
Download
Support
IBM Data Studio is a fully licensed product available at no charge and with no time restrictions.
Use IBM Installation Manager to select, download, and install only the code, features, or product extensions that you want. Product extensions allow you to extend your install beyond the Data Studio feature set.
To download the full product images for all platforms, see the Optional downloads section.
For most installations, you need the client component; for job management and health monitoring, you also need the web console component.
Component /Operating system
Version
Size
Method
Download
Data Studio client and 3rd-party product extensions* Red Hat Linux®**, SUSE Linux**, Windows™
V3.2
112MB
Installation Manager
Download
Data Studio Web Console Red Hat Linux**, SUSE Linux**, Windows™
V3.2
112MB
Installation Manager
Download
* Third-party product extensions for the Data Studio client: IBM DB2 Analytics Accelerator Studio V3.1 is a component of the DB2 Analytics Accelerator for z/OS program that provides a GUI for the administration of DB2 Analytics Accelerator.
** For Linux operating systems: You cannot install or upgrade to the 64-bit version of IBM Installation Manager if existing 32-bit products are installed on your computer. The 32-bit products that you previously installed with Installation Manager do not support the 64-bit version of Installation Manager. You must download the 32-bit version of the Linux package which includes a 32-bit version of Installation Manager. You can use the 32-bit version of Installation Manager to install either a 32-bit or 64-bit version of the product.
Contact IBM
Considering a purchase?
Request a quote
Email IBM
Or call us at: 800-966-9875
Priority code: 109HF03W
Tell your boss
Integrated data management: Managing data across its lifecycle
Optimize database application performance pre and post production
Essential resources
Getting started with IBM Data Studio for DB2
Data Studio information center
Forum: Data Studio
DB2 e-kit for Database Professionals

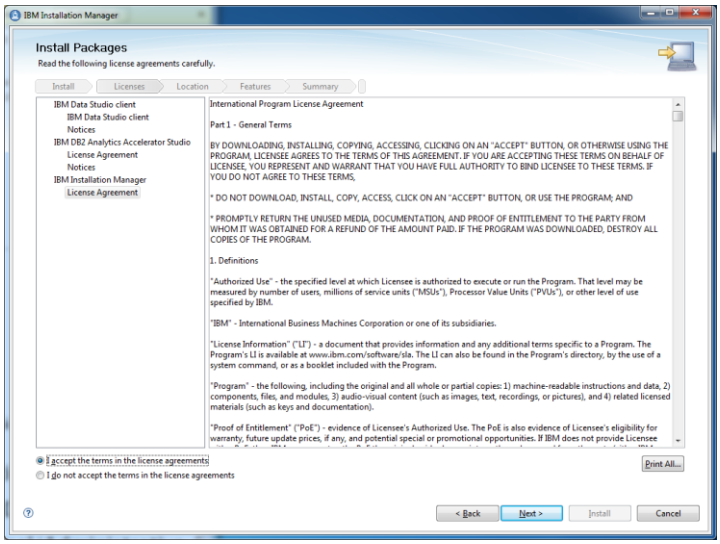
- Select the first one: **Data Studio client** and **3rd-party product extensions*** Red Hat Linux®**, SUSE Linux**, Windows™

OR

- Start the installer shipped with the Prerequisites.zip file.
    - Open folder **"**Prerequisites\IBM Data Studio",
    - Start **IBMIM_win32.exe** as **admin**
- Password from the IBM Account is required
- The IBM Installation Manager
- Select all packages and click next



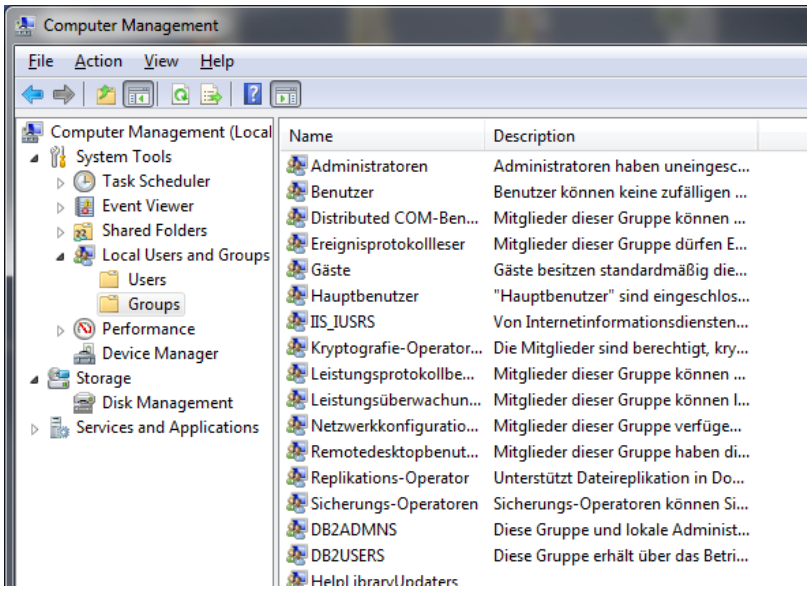
- Accept the license agreements



- Specify directories for (default is ok)
    - Shared Resources
    - Installation Manager
- Specify the directory for the IBM Data Studio (default is ok)
- Select a language
- Choose configuration of the help system (Access help from the Web)
- Start to install

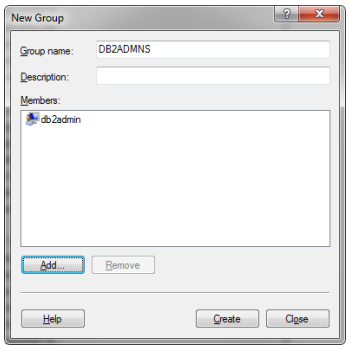
After the installation of DB2 and IBM Data Studio you need to check if the database groups (DB2ADMNS and DB2USERS) are registered:

- Control Panel/Administrative Tools/Computer Management / Local Users and Groups



2.3.3.1. Db2 Groups

- If not you need to create these groups
    - Right click on groups and select new group
    - First Group “DB2ADMNS” and add the db2admin to this group and select create



2.3.3.2. Create DB2ADMNS group

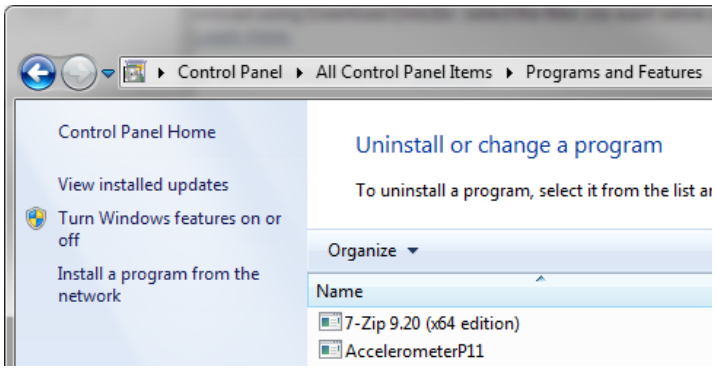
- Second Group “DB2Users”

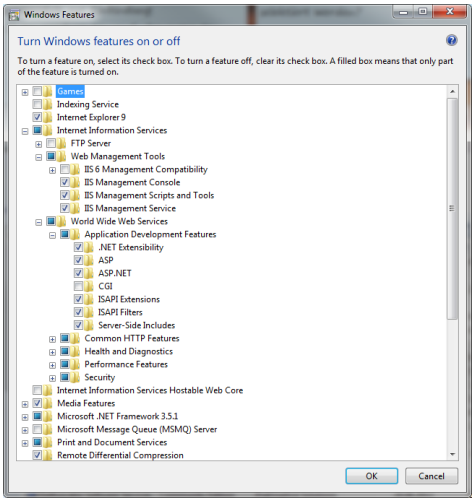
3. Setup Internet Information Service (IIS)

IIS is needed to host a website on the server. If your IIS is already activated and .NET framework is registered move on to section 4. If you don't know if your IIS is activated or if .NET is please registered follow the steps below.

3.1. Active IIS7

- Open Control Panel/Programs and Features,
- On the left side click the "Turn Windows features on/off" link.


Control Panel ▸ All Control Panel Items ▸ Programs and Features
Control Panel Home
View installed updates
Turn Windows features on or off
Install a program from the network
Uninstall or change a program
To uninstall a program, select it from the list a
Organize
Name
7-Zip 9.20 (x64 edition)
AccelerometerP11



- First select "Internet Information Service"(IIS) and open this node
- Open "Web Management Tools " and select/tick:
    - IIS Management Console
    - IIS Management Scripts and Tools
    - IIS Management Service
- Below IIS open "World Wide Web Services" / "Application Development Features" and select/tick:
    - .Net Extensibility
    - Asp
    - Asp .NET
- Click "OK" Button

3.2. Register .Net Framework 4.0 in IIS

- open cmd as administrator and go to folder:
    - %windir%\Microsoft.NET\Framework64\v4.0.30319\

  or
    - %windir%\Microsoft.NET\Framework\v4.0.30319\
- type here: aspnet_regiis.exeir

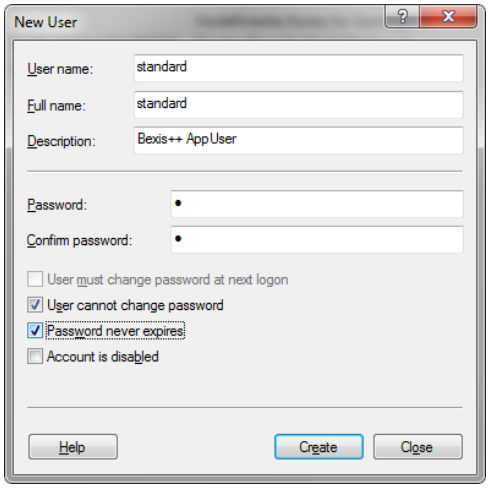
4. Deploy BExIS web application

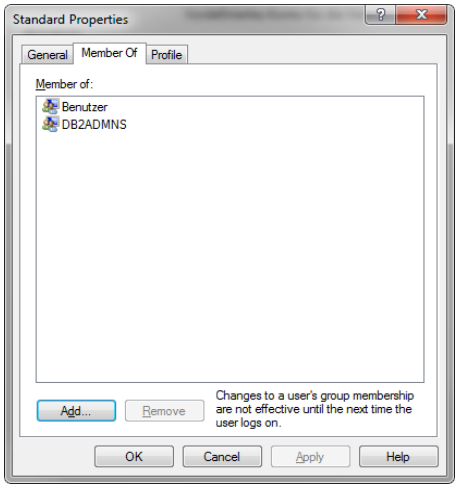
4.1. Configure server components

Perhaps some of the following configuration settings are already in place. But please check them out.

4.1.1. Create application user

- Open Control Panel\Administrative**Computer Management**
- Select Local Users and Groups
- Select Users and right click it
- Open "**New User…**":
    - Add a user called „standard"
    - Specify a password for your user
    - Click "Create"





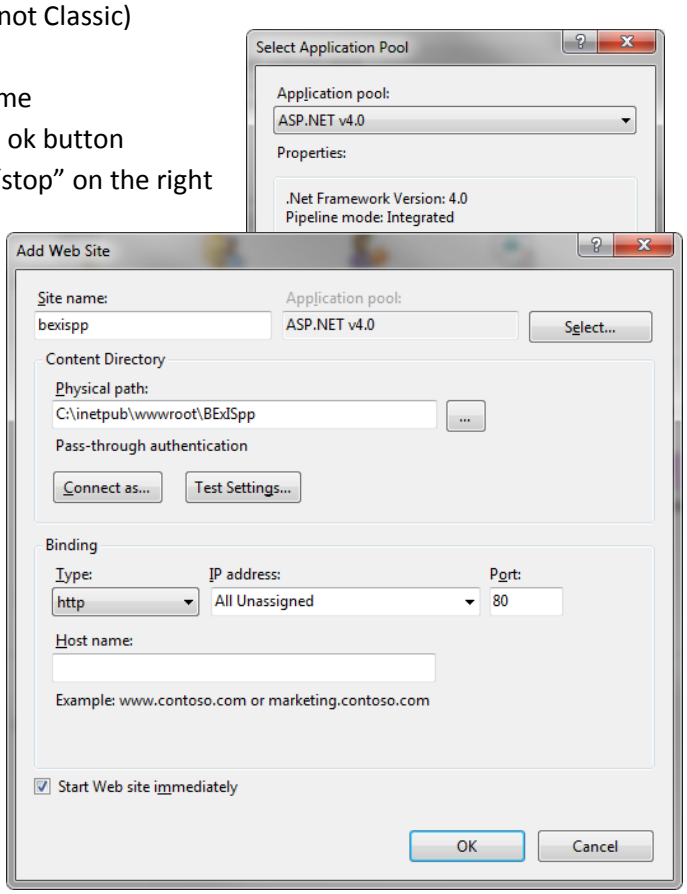
- The user must be a member of the group DB2ADMNS:
    - Right click on standard user and open properties
    - Select the "**Member Of**" tab
    - Click "Add..", Click "Advanced…", Click "Find Now"
    - Select "DB2ADMNS" Group and click "OK"

4.1.2. Configure IIS

- Configure application pool:
    - Open IIS (Control Panel/Administrative Tools)
    - Select **Application Pools** and right click in "**ASP .NET v4.0**" and select "**Set Application Pool Defaults…**"
    - Change "**General-Enable 32-Bit Applications**" to "True"
    - Change "**Process Model – Identity**" to "NetworkService"

4.1.3. Create Website

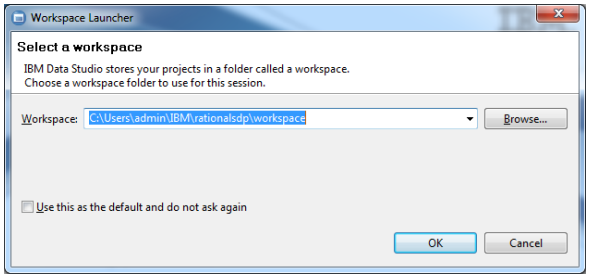
- Open IIS (Control Panel / Administrative Tools)
- Stop Default Website (Click it and choose “stop” on the right side)
- Create a new Website (right click on sites and choose Add Web Site)
- Select Application pool ASP .NET v4.0 (not Classic)
- Select physical path: C:\inetpub\wwwroot\Your_Websitename
- Confirm your selections by pressing the ok button
- Stop your website (Click it and choose “stop” on the right side)



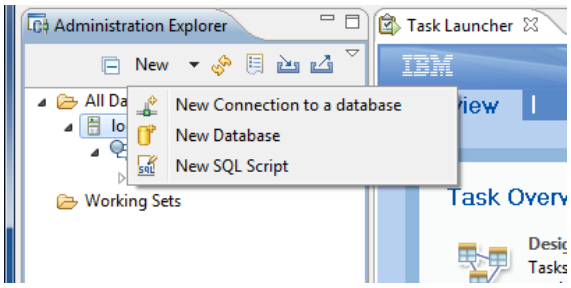
4.1.4. Create empty database

This is needed to restore the database provided with the BEXIS package. If you already have a database from a previous release you can skip this step.

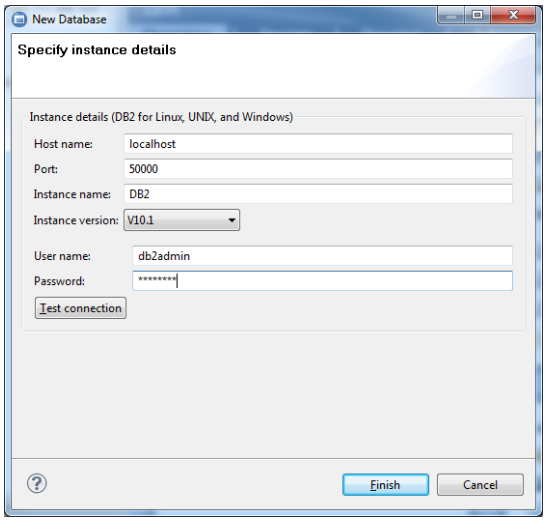
- Open IBM Data Studio as admin
- On first startup IBM Data Studio will ask for a workspace, use the selected one

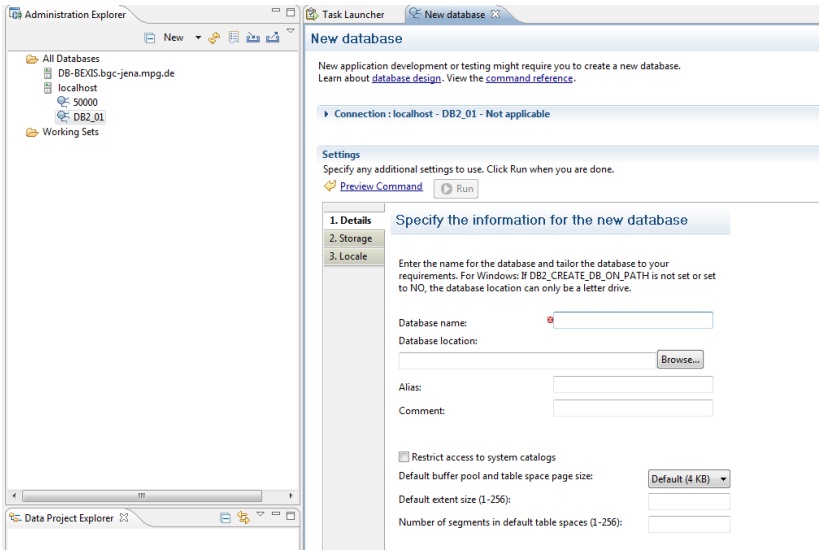

Workspace Launcher
Select a workspace
IBM Data Studio stores your projects in a folder called a workspace.
Choose a workspace folder to use for this session.
Workspace:
C:\Users\admin\IBM\rationalsdp\workspace
Browse...
Use this as the default and do not ask again
OK
Cancel

- On the left side you find all databases
- Click the dropdown button “New” in the Administration Explorer panel
- Select “New Database”

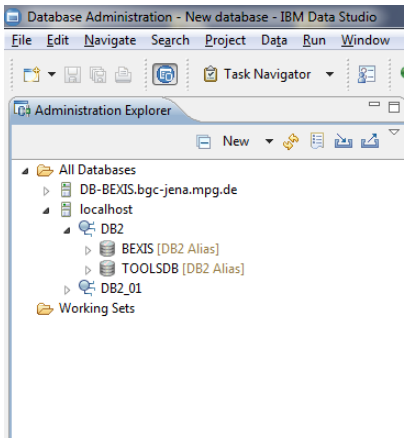


- Now connect to your instance
- Default Values
  - **Host Name:** **localhost**
  - **Port:** **50000**
  - **Instance:** **DB2**
- Choose Version 10.1
- Add db2admin with password and test connection




Administration Explorer
Task Launcher
New database
New database
New application development or testing might require you to create a new database.
Learn about database design. View the command reference.
Connection : localhost - DB2_01 - Not applicable
Settings
Specify any additional settings to use. Click Run when you are done.
Preview Command
Run
1. Details
2. Storage
3. Locale
Specify the information for the new database
Enter the name for the database and tailor the database to your requirements. For Windows: If DB2_CREATE_DB_ON_PATH is not set or set to NO, the database location can only be a letter drive.
Database name:
Database location:
Browse...
Alias:
Comment:
Restrict access to system catalogs
Default buffer pool and table space page size:
Default (4 KB)
Default extent size (1-256):
Number of segments in default table spaces (1-256):
All Databases
DB-BEXIS.bgc-jena.mpg.de
localhost
50000
DB2_01
Working Sets
Data Project Explorer

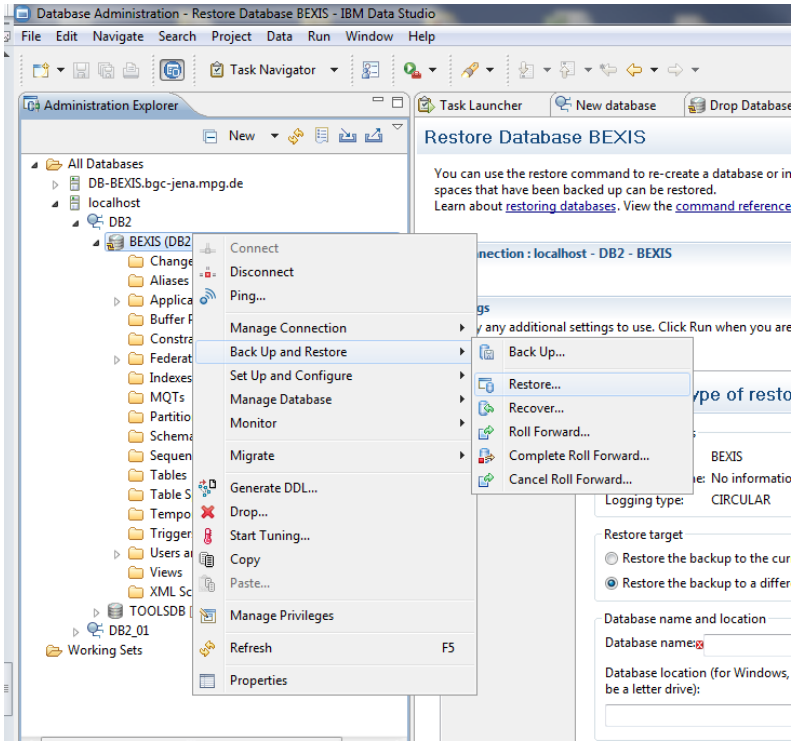
- Choose a database name (e.g. BEXIS) and select “Run”
- Enter your db2admin password again
- After successful creation you will see the new database under your Instance in the left side



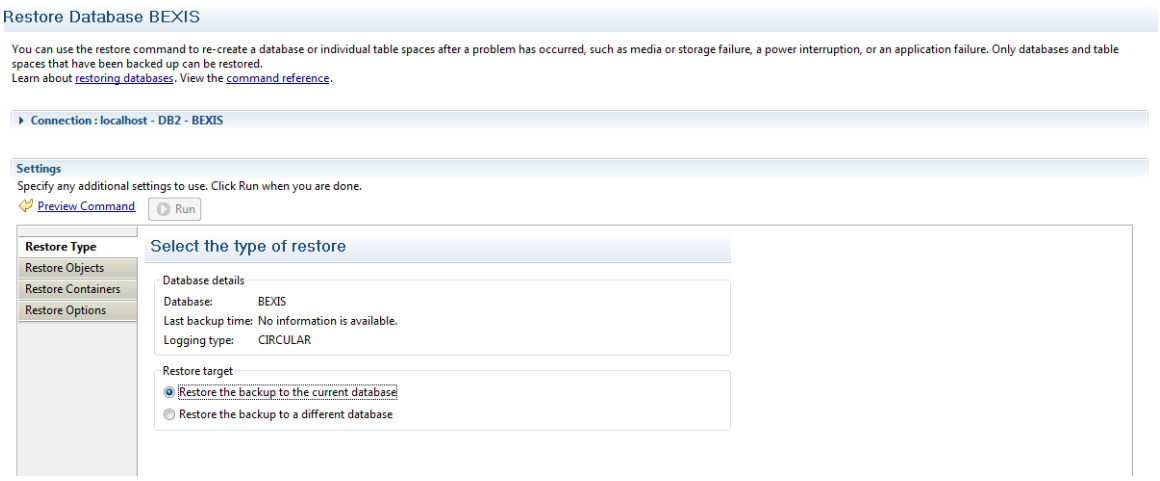
4.2. Install BEXIS package

4.2.1. Create database from backup

- Open IBM Data Studio
- Connect to your Database (right click on database Name and choose connect)
- Again right click on database Name and go to “Back Up and Restore” and select Restore

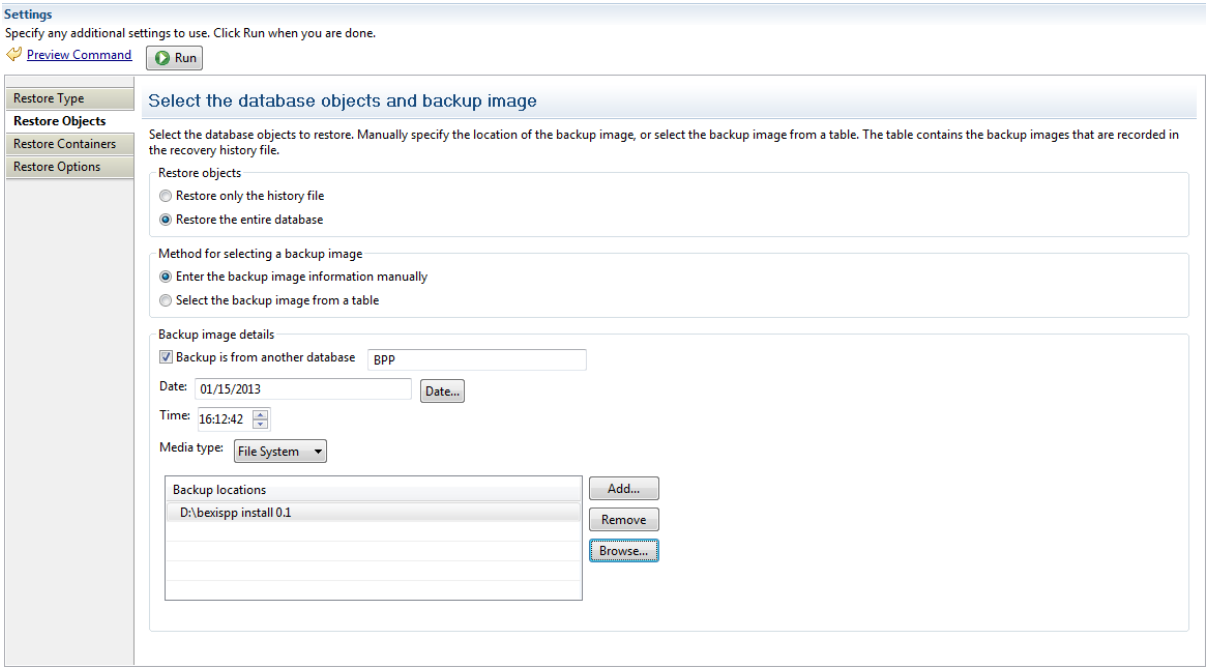


- Here you should see your selected database


Restore Database BEXIS
You can use the restore command to re-create a database or individual table spaces after a problem has occurred, such as media or storage failure, a power interruption, or an application failure. Only databases and table spaces that have been backed up can be restored.
Learn about restoring databases. View the command reference.
Connection : localhost - DB2 - BEXIS
Settings
Specify any additional settings to use. Click Run when you are done.
Preview Command
Run
Restore Type
Restore Objects
Restore Containers
Restore Options
Select the type of restore
Database details
Database: BEXIS
Last backup time: No information is available.
Logging type: CIRCULAR
Restore target
Restore the backup to the current database
Restore the backup to a different database

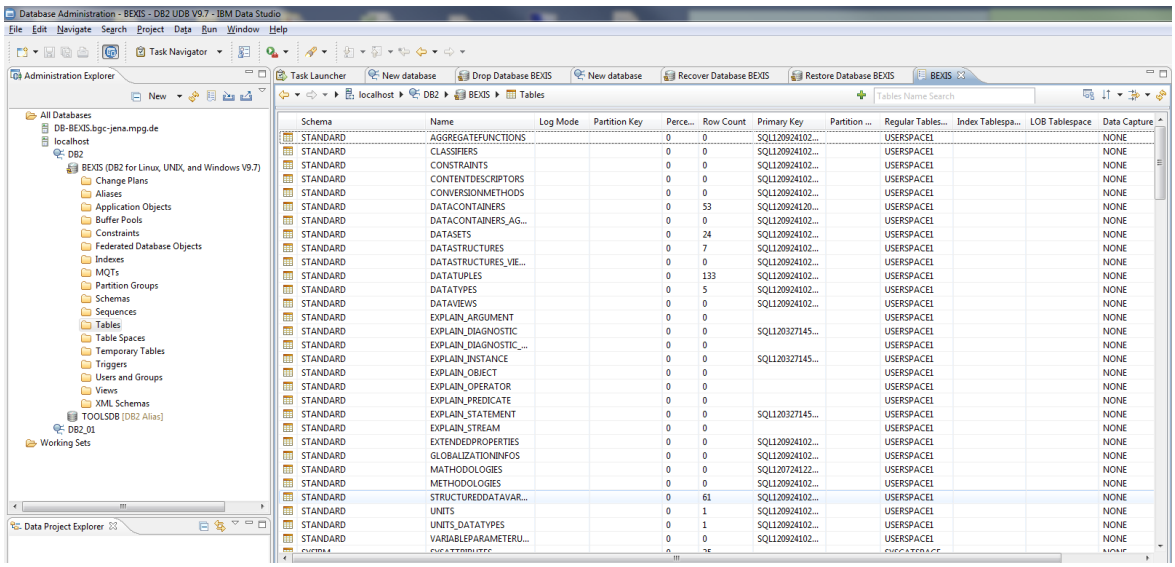
- For seed and sample backup go to your unzipped BExIS 2.2.0 package folder
    - Choose file called "**R22SESA.0.DB2.NODE0000.CATN0000.20131219115352**"
    - **R22SESA** – Database Name
    - **20131219** – date of the Image
    - **115352** – time of the image
- Go to "**Restore Objects**" and select in the "**Method for selecting a backup image**" Section "**Enter the backup image information manually**"
- Click on the Checkbox "**Backup is from another database**" and write the database name from the image "**R22SESA**" inside
- Select the date like this from the image
- Select the time like this from the image
- Click on the "**Add…**" Button
- Click on **"<Sepcify Backup location>"** and click the **"Browse…"** Button and select the Image file from the unzipped BExIS 2.2.0 package folder:

After this configuration it should look like the following screenshot:


Settings
Specify any additional settings to use. Click Run when you are done.
Preview Command
Run
Restore Type
Restore Objects
Restore Containers
Restore Options
Select the database objects and backup image
Select the database objects to restore. Manually specify the location of the backup image, or select the backup image from a table. The table contains the backup images that are recorded in the recovery history file.
Restore objects
Restore only the history file
Restore the entire database
Method for selecting a backup image
Enter the backup image information manually
Select the backup image from a table
Backup image details
Backup is from another database
bpp
Date: 01/15/2013
Date...
Time: 16:12:42
Media type: File System
Backup locations
D:\bexispp install 0.1
Add...
Remove
Browse...

- Select the “**Run**” Button

After a successful restoring you should have all tables of the schema “**Standard**”



4.2.2. Deploy Website

- Copy all files from the application folder (BPPR22_Website) of your unzipped BEXIS 2.2.0 package folder to C:\inetpub\wwwroot\Your_Websitename
- Copy the whole workspace folder (Workspace) from your unzipped BEXIS 2.2.0 package folder to C:\inetpub\wwwroot
- Copy the whole Data folder from your unzipped BEXIS 2.2.0 package folder to a place on your computer.
- open configuration file C:\inetpub\wwwroot\Your_Websitename\Web.config with a text editor:
    - adapt connection string in section connection Strings
        - insert your database name
        - insert your application user ID (name)
        - insert your chosen user password
    - check (and adapt) workspace path in section appSettings
    - check (and adapt) workspace path in section appSettings
- The IIS_IUSRS user need modify permissions to the same folders and files.
    - **BExISppTemplate_Clean.xlsm** under Workspace path\Modules\RPM\Template\
    - **Lucene** folder under Workspace path \Modules\Search\
    - **Data** folder under Data path

4.2.3. Start Website

- Open the IIS and select your Website
- Stop your website (Click it and choose “stop” on the right side)
- Open Browser and enter localhost

5. Hints

If you want the system to create all needed tables for you:

- Select your Website
- Go to the application settings and set “CreateDatabase” to “true“
- When you run the Website the database creates the tables
- **ATTENTION!! If you are working with an existing database with data inside the database will be cleared**
- After the first run, go to the application settings and set “CreateDatabase” to false

6. Errors

ERROR [08004][IBM] SQL30061

- Check if database exist. If not create this database
- If you run more than one instances of db2, you need to add another port number to the server name in the connection string
  - Localhost:50001

ERROR [08001][IBM] SQL30081n

- Please check if the Database Instance is running.
- If not, start the instance

ERROR HTTP-ERROR 403.14

- .Net is not registered for IIS 7
- Open the BEXIS 2.2.0 folder and start **aspnet_regiis.exe** as admin

ERROR HTTP- ERROR 404.2

- change apppool in II7 to integrated (asp.net 4)

ERROR SQL1159

- Initialization error with DB2 .NET Data Provider, reason code 10...
  for user 'IIS APPPOOL\ASP.NET v4.0'
- has something to do with App pool identity. Set the app pool identity as "Network service", this group has already read access to C:\Program Files\IBM\SQLLIB\BIN
- Open **IIS**
  Select **Application Pools** and right click in “**ASP .NET v4.0**” and select “**Set Application Pool Defaults…**”
- Process Model – Identity change to “**NetworkService**”